UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,727	03/30/2005	Masahide Sumiyama	043890-0732	1891

20277 7590 04/28/2006

MCDERMOTT WILL & EMERY LLP
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER	
ENSEY, BRIAN	
ART UNIT	**PAPER NUMBER**
2615	

DATE MAILED: 04/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/529,727	SUMIYAMA ET AL.	
	Examiner	Art Unit	
	Brian Ensey	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 March 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/30/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The preliminary amendment submitted on 3/30/05 addressed this issue, however the corrected drawing has not been received.

Specification

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:
(1) if a machine or apparatus, its organization and operation;
(2) if an article, its method of making;
(3) if a chemical compound, its identity and use;
(4) if a mixture, its ingredients;
(5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because the last sentence "A speaker module mentioned above not only emits sound but also improves in design" refers to the purported merits of the invention and also is not grammatically correct. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto Japanese Utility Model Laid-Open No. H1-159487.

Regarding claim 1, Matsumoto discloses a speaker module comprising: a magnetic circuit having a magnetic gap (inherent in speaker 2); a frame coupled with the magnetic circuit (inherent in speaker 2); a first diaphragm coupled with a periphery of the frame (inherent in speaker 2); a voice coil coupled with the first diaphragm (inherent in speaker 2), a part of the voice coil inserted into the magnetic gap (inherent in speaker 2); a panel (1) coupled with the

periphery of the frame; a second diaphragm (5) coupled with the panel, thereby forming a hermetic space with the panel and the first diaphragm, and acoustically coupled with the first diaphragm; and a light emitting section (6) for emitting light to the panel, wherein the panel transmits the light from the light emitting section to a side of the second diaphragm (See Fig. 1 and translation).

Regarding claim 2, Matsumoto further discloses the second diaphragm is made of transparent material (See Fig. 1 and translation).

Regarding claim 3, Matsumoto further discloses the second diaphragm has a substantially plane shape (See Fig. 1 and translation).

Regarding claim 4, Matsumoto further discloses the second diaphragm is larger than the first diaphragm in area (See Fig. 1 and translation).

Regarding claim 5, Matsumoto further discloses at least a part of the panel (4) is made of transparent material (See Fig. 1 and translation).

Regarding claim 6, Matsumoto further discloses the light emitting section (60) is implanted in the panel (See Fig. 1 and translation).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view of Atsushi Japanese Patent Application No. 11-270713.

Regarding claim 7, Matsumoto discloses a speaker module as claimed. Matsumoto further teaches the light emitting section is a lamp. Matsumoto does not expressly disclose the light emitting section is a light emitting diode. However, the use of an LED for illumination is well-known in the art and Atsushi teaches using an LED to illuminate a dynamic loudspeaker (See Fig. 1 and translation solution). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the LED of Atsushi in place of the lamp of Matsumoto for space minimization and less power useage.

Claim Rejections - 35 USC § 103

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view of Atsushi Japanese Patent Application 10-052174.

Regarding claim 8, Matsumoto discloses a speaker module comprising: a magnetic circuit having a magnetic gap (inherent in speaker 2); a frame coupled with the magnetic circuit (inherent in speaker 2); a first diaphragm coupled with a periphery of the frame (inherent in speaker 2); a

voice coil coupled with the first diaphragm (inherent in speaker 2), a part of the voice coil inserted into the magnetic gap (inherent in speaker 2); a panel (1) coupled with the periphery of the frame; a second diaphragm (5) coupled with the panel, thereby forming a hermetic space with the panel and the first diaphragm, and acoustically coupled with the first diaphragm; and a light emitting section (6) for emitting light to the panel, wherein the panel transmits the light from the light emitting section to a side of the second diaphragm (See Fig. 1 and translation). Matsumoto does not expressly disclose a device comprising a main unit, wherein the speaker module is installed into the main unit, supplied with electricity from the main unit to the light emitting section, and emits light, wherein the speaker module is supplied with electricity from the main unit to the voice coil, and emits sound. However, Atsushi teaches the use of an illumination display in an audio unit wherein a speaker unit and a light emitting section are both powered from the same source (See Fig. 1 and translation abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the speaker system of Matsumoto in the system of Atsushi for an illumination display for audio equipment with a compact structure.

Conclusion

The Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group **Art Unit 2615**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, Va. 22313-1450

Or faxed to:

(571) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to:

Customer Service Window
Randolph Building
401 Dulany Street
Arlington, VA 22314

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BKE
April 25, 2006

SINH TRAN
SUPERVISORY PATENT EXAMINER